

# IDAHO

## DEPARTMENT OF FISH AND GAME

Jerry M. Conley, Director

MAGIC VALLEY STEELHEAD HATCHERY

Annual Report



October 1, 1984 - September 30, 1985

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## Magic Valley Steelhead Hatchery

### ABSTRACT

No fish were reared at Magic Valley Hatchery this year. Limited construction was begun. The first phase of the water collection system was started in February 1985 and completed in August 1985. Fish will most likely not be reared here before the spring of 1987, depending upon construction progress.

During 1984-85, Hagerman National Hatchery reared 231,991 steelhead for Magic Valley Hatchery.

A second well for potable water was drilled on the hatchery site during the summer of 1985 to complement the well already in service to the Corps of Engineers office.

The Corps of Engineers office and materials testing lab was moved from Hagerman National Hatchery to Magic Valley Hatchery in the spring of 1985, and a fence was installed.

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## OBJECTIVES

The objectives of the Magic Valley Steelhead Hatchery are to:

1. Hatch and rear smolt-size steelhead trout for planting in the Salmon River drainage.
2. Assist in Fish and Game activities where needed, when possible.
3. Assist and monitor crews working on hatchery design and construction whenever possible.
4. Act as liaison between construction site and Nampa and Boise offices.
5. Maintain liaison with Lower Snake River Compensation Plan personnel.
6. Assist in rearing steelhead at Hagerman National Hatchery for Magic Valley Hatchery.

## INTRODUCTION

The hatchery is located seven miles north and west of Filer in the Snake River Canyon at the mouth of Cedar Draw. It will receive its water from Crystal Springs on the north side of the river, which now has been developed to a capacity of approximately 120 cfs. This water is to be piped to the hatchery site on the south river bank via a pipeline. Water temperature is a constant 59 F, and the water is of excellent quality for fish culture.

The physical features at the hatchery, as it now exists, are:

- 1 building which houses an office, a crewroom, feed storage, and shop.
- 12 raceways 190' x 5' x 24"
- 4 raceways 320' x 6' x 30"
- 2 raceways 210' x 10' x 36"
- 1 master valve complex
- 8 very large earthen raceways

All these facilities will be removed prior to the construction of the new hatchery in the summer of 1986.

## FISH PRODUCTION

No fish were reared at the hatchery in 1984-85. Fish were reared for Magic Valley Hatchery by the Hagerman National Hatchery as follows:

<u>Strain</u>	<u>Number</u>	<u>Pounds</u>	<u>Fish per lb.</u>	<u>Truck loads</u>	<u>Planting site</u>	<u>Date planted</u>
A	133,099	29,415	4.52	5	Salmon R. at Sawtooth Hatchery	3/26 to 4/5/85
A	89,688	21,625	4.15	4	L. Salmon at Hazard Creek	4/15 to 5/1/85
B	9,204	1,950	4.72	1	E.Fk. of the Salmon River	4/29/85

These fish were reared in the "trout" section of Hagerman, which has been used for steelhead while Magic Valley is under construction. This project will continue until such time as this hatchery goes on line for production. Mike Graham assisted in rearing these fish at Hagerman as a representative from Magic Valley. Assistance was also given during loading and planting times by both personnel from Magic Valley Hatchery. A private diesel tractor was hired at planting time to pull one of the Magic Valley trailers for planting our portion of the steelhead.

## FISH HEALTH

The fish reared at Hagerman were relatively free of disease this year. For a full report on fish health, refer to Hagerman National Hatchery's annual report.

## HATCHERY IMPROVEMENTS

The first phase of the water collection system was completed. Water capacity was developed at approximately 120 cfs. This is a high quality water supply. The water is high in dissolved oxygen, 9 parts per million, and has little or no impurities and good hardness. There is some danger of nitrogen entrapment as the water enters the pipeline for transfer to the south shore of the river. This will be dispersed on the south shore by the use of a 29 1/2 foot control tank. This tank will be filled with Koch rings to aide in dispersing any nitrogen gasses. The control tank will also maintain a constant water head to the hatchery building and raceways.

well #2 was drilled and completed. This well has been pumped at 265 gallons per minute. This well has considerably more capacity than what is being used but the pump only has a capacity of pumping 265 gallons per minute.

New, heavier capacity electric lines and poles were installed by Idaho Power Company crews.

#### **MISCELLANEOUS ACTIVITIES**

Magic Valley Hatchery personnel worked on check stations during the year and participated in training activities. These included physical fitness, pistol qualification, law enforcement training, and attendance of various meetings.

Assistance was given to Hagerman National Hatchery by one hatchery person to help with the rearing of steelhead for Magic Valley Hatchery.

Assistance was provided to Dworshak National Hatchery in the spring of 1985 hauling surplus adult steelhead to natural spawning areas. The fish were put in Lawyers Creek, Potlatch Creek, El Dorado Creek, Newsome Creek, Crooked River, and American River. Smolts were also hauled to some of these areas. This operation took over a month to accomplish.

Mike Graham manned the East Fork fish collection facility during the summer and until the end of the season. He also assisted in spawning the fish at this facility.

Water table gauges were read weekly throughout the year and the report called to Corps of Engineers, Walla Walla office.